

**REMARKS**

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

**Status of Claims:**

No claims are currently being added, cancelled or amended.

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

Claims 1, 2 and 4-24 remain pending in this application, in which claims 10-18 and 21-23 are withdrawn from consideration as being directed to non-elected species.

**Drawing Objections:**

In the final Office Action, the drawings were objected to under 37 C.F.R. § 1.83(a), as failing to show every feature of the invention specified by the claims. In particular, the final Office Action asserts that the features “a variation rate estimating section” and “a vehicular traveling modifying section” of claim 1 are not shown in the drawings.

In reply, as indicated on page 11 in the ‘Remarks’ of the previously-filed response to the previous non-final Office Action, presently pending claim 1 is a combination of original claim 1 (minus one element) and original claim 3. The original disclosure includes the original claims in addition to the specification.

Hence, the features of the variation rate estimating section and the vehicular traveling control modifying section are supported by the original disclosure. Hence, no new matter has been introduced into claim 1.

With respect to where support can be found in the drawings for the last two elements of claim 1, the variation rate estimating section that estimates the variation rate of the detection range of the vehicular forward substance detecting section when the impulse detecting section detects that the impulse has been applied to the forward substance detecting section corresponds to each of steps S2, S201 in Fig. 6, steps S2, S221 in Fig. 9, steps S2,

S231 in Fig. 10, and steps S10, S241 in Fig. 11. The vehicular traveling control modifying section corresponds to steps S207 to S209 in Fig. 6.

Accordingly, the last two elements of claim 1 are shown in the drawings.

**Specification Objection:**

In the final Office Action, the amendment filed on September 19, 2009 was objected to, because it allegedly introduced new matter into the disclosure. Specifically, the final Office Action asserts that the phrase “a variation rate estimating section” and the phrase “a vehicular traveling modifying section” of claim 1 are not shown in the original disclosure.

In reply, the phrase “a variation rate estimating section” and the phrase “a vehicular traveling modifying section” of claim 1 are features of original claim 3, and as such are a part of the original disclosure. However, in the interest of expediting prosecution, paragraph 0040 of the specification has been amended to specifically refer to these features.

**Claim Rejections – 35 U.S.C. § 112, 1<sup>st</sup> and 2<sup>nd</sup> Paragraphs:**

In the final Office Action, claim 1 was rejected under 35 U.S.C. § 112, 1<sup>st</sup> paragraph, and claims 1 and 19 were rejected under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, for the reasons set forth on pages 3 and 4 of the final Office Action. In reply, and as discussed above with respect to the objections to the drawings and the specification, there is clear written description support in the specification for the phrase “a variation rate estimating section” and the phrase “a vehicular traveling modifying section” (which are features of original claim 3), and in any event the specification has been amended to expedite prosecution of this application.

Accordingly, claims 1 and 19 fully conform with 35 U.S.C. § 112, 1<sup>st</sup> and 2<sup>nd</sup> paragraphs.

**Claim Rejections – Prior Art:**

In the final Office Action, claims 1, 2, 7, 9, 19 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese laid open patent application JP 11142520 to Arita et al. (in view of English translation); claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Arita et al. in view of U.S. Patent Publication No. 2003/0201878 to Bai et

al. and further in view of U.S. Patent Publication No. 2002/0091479 to Maruko et al. and U.S. Patent Publication No. 2001/0016798 to Kodaka et al.; and claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Arita et al. in view of Bai et al. These rejections are traversed with for the reasons given below.

The final Office Action asserts that the claimed impulse detecting section that detects such an impulse that a detection range of a vehicular forward substance detecting section is varied has been applied to a vehicular forward substance detecting section is disclosed in paragraphs 0009, 0010, 0028, 0035, 0039, 0045, 0065-0067, and Figure 2 of Arita et al. Applicant has reviewed paragraphs of 0009, 0010, 0028, 0035, 0039, 0045, 0065 to 0067, and Figure 2 of Arita et al., and cannot find any disclosure in those portions of Arita et al. that disclose, teach or suggest the claimed impulse detecting section. Rather, these portions of Arita et al. describe an optical axis adjustment, and they do not disclose, teach or suggest an impulse detecting section as recited in claim 1.

In more detail, Arita et al. describes a method of adjusting the center of a detection area detected by a range finder at an appropriate position for adjusting the axis of the range finder incorporated into a vehicle in which waves are irradiated on a predetermined detection area in front of the vehicle in a scanning manner. Arita et al. also describes that detection data including at least positional information on the object to be detected which is located in the detection area is judged and outputted according to the waves reflected on the object to be detected, in which the method includes: obtaining plural pieces of detection data of the preceding vehicle by the range finder, when the vehicle is running straight on the straight line following the preceding vehicle; processing the plural pieces of detection data of the preceding vehicle statically; judging the appropriate position as the average center of the preceding vehicle; and changing the parameter of the detection area of the range finder so that the center of the detection area coincides with the appropriate position.

Note that paragraphs 0009 and 0010 of Arita et al. describe that an imperfect alignment of a detection area may occur due to a light impact of the vehicle, but this only explains how the detection area change may occur, and it certainly does not disclose, teach or suggest that once an impact is detected, a variation rate estimating section and a vehicular traveling control modifying section perform specific processes as recited in claim 1. Rather,

in Arita et al., a correction of a detection area of a vehicle takes place at a predetermined time, such as when the vehicle is being serviced at a dealership, and not when an impulse is detected that causes a variation in a detection range.

No disclosure of the claimed impulse detecting section exists in the above-cited portions of Arita et al. listed in the final Office Action. As such, independent claims 1, 19 and 20 patentably distinguish over Arita et al., and in which neither Bai et al. nor Kodaka et al. rectifies these deficiencies of Arita et al.

**Conclusion:**

Since all of the issues raised in the final Office Action have been addressed in this Amendment and Reply, Applicant believes that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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